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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,278	11/25/2003	Alain Poiraud	2937-115	4789
6449 7	590 09/13/2005	EXAMINER		
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W.			VASUDEVA, AJAY	
SUITE 800		ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20005			3617	
		DATE MAILED: 09/13/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/720,278	POIRAUD, ALAIN			
		Examiner	Art Unit			
		Ajay Vasudeva	3617			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailling date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	•					
1)[  ]	Responsive to communication(s) filed on 18 Ju	une 2005.				
		action is non-final.				
	,—					
Dispositi	on of Claims					
<ul> <li>4)  Claim(s) 1-3 and 5-14 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-3,5,9,11 and 12 is/are rejected.</li> <li>7)  Claim(s) 6-8,10,13 and 14 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Applicati	on Papers					
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>18 June 2005</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Example 1	)⊠ accepted or b)□ objected to drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachmen	t(s)					
2) Notice 3) Information	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

#### **DETAILED ACTION**

#### **Drawings**

1. Applicant is requested to submit formal drawings.

### Specification

- 2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:
  - The proportion of the weight of the anchor on the tip is higher than 20% when said anchor is in an anchoring position, as set forth in claim 12 (emphasis added).

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification, as originally filed, in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claim recites the proportion of the weight of the anchor on the tip being higher than 20% when the anchor is in an anchoring position. However, the <u>original disclosure</u> does not specify such proportion of the weight <u>when the anchor is in an anchoring position</u> (emphasis added).

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Claim Rejections - 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed

publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1 and 3 are rejected under 35 U.S.C. 102(a) as being anticipated by FR 2820108

('108). (English translation provided with the previous Office action).

Re claim 1, FR ('108) shows a boat anchor (figures 1 and 2), having a fluke [2] with a tip

[6] and a back with a curved rear edge, and a shank [1] mounted on the fluke. The shank has a

curved edge, and an opening [3] at an end opposite the fluke. The opening is offset from a

plane tangent to the back edge of the fluke and to the edge of the shank. The shank is mounted

on the half portion of the fluke that is near to the tip than to the back edge of the fluke, as clearly

evident in figure 2.

Regarding the limitation "unballasted fluke" of the claim, applicant's disclosure has not

specifically defined as to what can, or cannot, be considered a ballast; neither has applicant

defined a clear cut distinction between a "ballasted fluke" and an "unballasted fluke". Therefore,

the limitation "ballast" has been broadly interpreted to mean any such weight that is provided in

addition to the original weight of the fluke so as to further increase the total weight of the fluke.

In the present case, the thickened front portion of the fluke is integral with the rest of the

fluke (see fig. 2), and therefore constitutes the original weight of the fluke. There is no provision

of any additional weight to further increase the original weight of the fluke. As such, the fluke of

FR ('108) is considered to be an unballasted fluke.

Re claim 3, the massive counterpoint causes the center of mass <u>of the anchor</u> to be located nearer the tip so that the tip of the anchor is always oriented toward the sea bed (see English translation, page 5, lines 24-25)

## Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 2, 5, 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR ('108).

FR ('108) shows an anchor, as above, disclosing all limitations of claim 1.

Re claims 2 and 11, applicant has set forth a ratio by reciting "the ratio of the surface of the fluke to the weight of the anchor is higher than 100 cm<sup>2</sup>/kg".

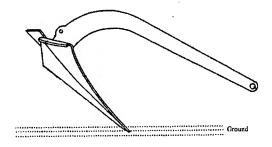
FR ('108) has not disclosed any specific ratio of the surface area with respect to the weight of the anchor.

However, it would have been an obvious design choice for one skilled in the art at the time of the invention to provide the fluke with a sufficiently large surface area, which would have maximized the area of contact when embedded in the ground, thereby increasing the drag resistance of the anchor. Additionally, it would also have been obvious for one skilled in the art at the time of the invention to design the anchor weight at a sufficiently moderate level so that

one could easily handle the anchor without requiring extreme physical effort. Keeping the desirability of large surface area and low weight in view, it would have been well within the realm of engineering design optimization for one to construct an anchor wherein the ratio of the fluke surface to the anchor weight was higher than 100 cm<sup>2</sup>/kg.

Note re claims 2 and 11: The specification discloses the ratio of the fluke surface to the anchor weight without describing the criticality of such a ratio. Nothing in Applicant's disclosure indicates that a ratio other than "higher than 100 cm²/kg" would be inoperative, not solve any particular problem, or not produce the unexpected results. As such, the claimed ratio or the angular relationship is considered arbitrary, and therefore obvious. Where patentability is based upon particular chosen dimensions, ratios or angular relationships recited in the claims, the applicant must show that such are critical. In the present case, the applicant disclosure has simply not shown the chosen ratio as being critical, which therefore does not serve in any way to patentably distinguish the claimed invention from the prior art.

Re claims 5 and 12, in certain instance – such as when the anchor is tipped in an orientation shown below -- most of the weight of the anchor would be borne by the tip of the anchor. In such orientation, the proportion of the weight of the anchor on the tip would be higher than 20%. It is noted that claim 5 has not set forth the claimed weight distribution in an anchored position.



Alternatively, under certain other conditions – such as when the anchor is resting in an anchoring position on an sloped seabed/surface, and the tip of the fluke is positioned down slope – the proportion of the weight of the anchor on the tip would again be higher than 20%. Applicant may also note that a seabed is not always a level ground, and anchors are capable of settling in any one of countless positions on an uneven floor in which the weight borne by the tip of the anchor would be higher than 20%.

Re claim 9, the concave upper surface of the back upper side is considered equivalent to a sand guide because if the anchor were dragged through the sand, the sloped surface would allow the sand to be guided over and behind the anchor.

## Allowable Subject Matter

9. Claims 6-8, 10, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Response to Arguments

10. Applicant's arguments filed 6/18/2005 have been fully considered but they are not persuasive.

**Applicant's Argument**: Applicant argues that the fluke of FR ('108) includes a massive counterpoint that "serves as a ballast" (emphasis added by examiner), and is therefore not an "unballasted" fluke.

Examiner's Response: Applicant's Specification has neither specifically defined as to what can, or cannot, be considered a ballast; nor has the applicant drawn a clear cut distinction between a "ballasted fluke" and an "unballasted fluke". Therefore, the limitation "ballast" has been broadly interpreted to mean any such weight that is provided in addition to the <u>original</u> weight of the fluke so as to further increase the total weight of the fluke.

In the present case, the thickened front portion of the fluke is integral with the rest of the fluke (see fig. 2), and therefore constitutes the original weight of the fluke. There is no provision of any additional weight to <u>further increase</u> the <u>original weight</u> of the fluke. Therefore, the fluke of FR ('108) is considered to be an unballasted fluke.

Further, although the fluke of the instant invention does not carry a "massive counterpoint", it does possess a mass -- and therefore a weight -- like every other type of anchor. On this account, even the instant invention can be considered to have a ballasted fluke. The claims, on the other hand, fail to recite any specific feature that distinguishes the weight of applicant's fluke from the weight of fluke of FR ('108).

**Applicant's Argument**: Applicant argues that the drawing of FR ('108) is an "artistic" representation, and that drawings are unreliable and should not be interpreted to show the claimed feature. Applicant also submitted an alternative view of the anchor of FR ('108).

**Examiner's Response**: All drawings are considered "artistic" representations and form a part of the disclosure. Unless expressly indicated that the drawings are "not to scale", such

are considered to convey a fairly accurate depiction of the invention. FR ('108) requires the tip of the anchor to be always oriented toward the sea bed (see English translation, page 5, lines 24-25). In conjunction with such disclosure, figure 2 clearly shows and inarguably supports the mounting of the shank on the half portion of the fluke that is nearer to the tip than to the back edge of the fluke. An alternative positioning of the shank on the rear half of the fluke, as being proposed by the applicant, teaches away from the intended orientation of the fluke tip.

Further, it is not clear as to what forms the basis of the alternative view suggested by the applicant.

### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The

examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva Examiner Art Unit 3617

AV

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